

Work Order ID 148086

Friday, June 24, 2016 9:09:00 AM

148086

Page 1

Item ID: D119-796-021 Accept ***N900040100*** Setup Start ***NS1***
 Revision ID: Stop ***NS2***
 Item Name: AW119 Standard Landing Gear Assembly - Standard OEM Protection
 Start Date: 9/27/2016 Start Qty: 1.00 ***1*** Cust Item ID:
 Required Date: 10/26/2016 Req'd Qty: 1.00 ***1*** Customer:
 Reference:

Approvals: Process Plan: dem Date: 16/06/24 Tooling: _____ Date: _____ Run Start ***NR1***
 QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	Revision Nbr								
D119-796-021	A					DAS 21 9-89			
IIN-D119-796	E								
100	Pick Kit	0.00							

100

Packaging

Packaging

Memo

Photocopy bluefile and create labels as per PPP D119-796-021 chg 003/ D119-646-041 paperwork

0.00

110

110

HandFinish

Hand Finishing

Memo

ASSEMBLE AS PER DWG AND NOTES 8,9,10,11

ASSEMBLE WITH PROSEAL BATCH: 135390

2-INSTALL DECAL D2729-4

0.00

1.16

DAS
36
9-89

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date : _____	Step #: _____	QTY Effective : _____		MRB (QSI042) Approval	
Description Work Order Deviation		Disposition		Completed By	
				Lead hand / Supervisor Approval Verification	
				QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY			
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐	No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐	Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐	Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐	Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐	Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐
OTHER : _____					

Work Order ID 148086

Friday, June 24, 2016 9:09:00 AM

148086

Page 2

Item ID: D119-796-021

Accept

N900040100Setup Start ***NS1***

Revision ID:

Stop ***NS2***

Item Name: AW119 Standard Landing Gear Assembly - Standard OEM Protection

Start Date: 9/27/2016 Start Qty: 1.00 ***1***

Cust Item ID:

Required Date: 10/26/2016 Req'd Qty: 1.00 ***1***

Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Run Start ***NR1***

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
120	QC5- Inspect part completeness to step on W/O	0.00							
120									
QC	Memo	0.08				1			DB 16-10-25
Quality Control									
130	Identify as per dwg & Stock Location: <i>Ship</i>	0.00							
130									
Packaging	Memo	0.04				IX			DAS 36 16/10/25 9-89
Packaging	Identify and pack for shipping as per PPP D119-796-021 Location: _____ PPP Rev: _____								
140	QC21- Final Inspection - Work Order Release	0.00							
140									
QC	Memo	0.02							DAS 21 9-89 OCT 25 2016
Quality Control									

DAS
21
9-89

OCT 25 2016

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date : _____		Step #: _____		QTY Effective : _____			MRB (QSI042) Approval		
Description Work Order Deviation				Disposition					
								Completed By	
								Lead hand / Supervisor Approval Verification	
								QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY							
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐				
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐				
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐				
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐				
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐				
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐				
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐				
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐				
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐				
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐				
Past Expiry Date ☐	Manufacturing Process ☐	OTHER : _____							
Misidentified ☐	Past Due ☐								

Picklist Print

Friday, June 24, 2016 9:08:59 AM

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Work Order ID: 148086

148086

Parent Item: D119-796-021

D119-796-021

Parent Item Name: AW119 Standard Landing Gear Assembly - Standard OEM Protection

Start Date: 9/27/2016

Required Date: 10/26/2016

Start Qty: 1.00

Required Qty: 1.00

Comments: IPP REV:A NEW ISSUE 15-05-012 JLM VERIFIED BY:DD IPP
REV:B 15.08.25 AS PER IIN REV.E DD VERF:JLM

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
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D119-646-041

Manufactured No

110

Each

2.0000

2

2

D119-646-041

Replacement Skidtube with Wearpads, Fits LH or RH

Location

Loc Qty

Loc Code

FG

2

144509

1

146618

1

D119-796-151

Manufactured No

110

Each

1.0000

1

1

D119-796-151

FWD Crosstube Installation with Step (no hardware)

Location

Loc Qty

Loc Code

FG

1

146654

1

D119-796-251

Manufactured No

110

Each

1.0000

1

1

D119-796-251

AFT Crosstube Installation with Step (no hardware)

Location

Loc Qty

Loc Code

FG

1

146639

1

DAS
36
9-89

16/10/24
B14824 (X)
B148127 (X)

DAS
36
9-89

16/10/24
151305 (X)

DAS
36
9-89

16/10/24
151308 (X)

DQA: _____ Date: _____

**WORK ORDER NON-CONFORMANCE / UPDATE**

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date : _____	Step #: _____	QTY Effective : _____		MRB (QSI042) Approval	
Description Work Order Deviation		Disposition			
				Completed By	
				Lead hand / Supervisor Approval Verification	
				QC / QA Coordinator Approval	
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐			
OTHER : _____					

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Work Order ID: 148086

148086

Parent Item: D119-796-021

D119-796-021

Parent Item Name: AW119 Standard Landing Gear Assembly - Standard OEM Protection

Start Date: 9/27/2016

Required Date: 10/26/2016

Start Qty: 1.00

Required Qty: 1.00

D2652 Manufactured No 110 Each 461.0000 48 48

D2652

Bushing

148315 x 21
149586 x 27

DAS
6
9-89

SEP 22 2016

Location Loc Qty Loc Code

FG	45	
31985	45	
ST009	110	
145958	110	
ST012a	306	
147559	306	

D3407-041 Manufactured No 110 Each 11.0000 2 2

D3407-041

Tow Ring

148622

DAS
6
9-89

SEP 30 2016

Location Loc Qty Loc Code

st529	11	
145441	11	

D3417-5 Manufactured No 110 Each 85.0000 4 4

D3417-5

Washer

148700

DAS
6
9-89

SEP 22 2016

Location Loc Qty Loc Code

ST035	85	
145908	85	

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :				MRB (QSI042) Approval 	
Description Work Order Deviation				Disposition					
								Completed By 	
								Lead hand / Supervisor Approval Verification 	
								QC / QA Coordinator Approval 	

Root Cause				FAULT CATEGORY							
Environment	☐	No Re-verification	☐	Pressure/Forced	☐	Temperature/Cure	☐	Power Loss/Surge	☐	Positioned Wrong	☐
Design	☐	Operator	☐	Bending	☐	Set-up	☐	Folio/Program	☐	Outside Dimensions	☐
Doc/Data	☐	Offset/Setup	☐	Centre Not Concentric	☐	BOM/Route	☐	Grain	☐	Over/Under tolerance	☐
Equip/Tooling	☐	Supplier	☐	Cracks	☐	Broken/Damage/Defect	☐	Weld	☐	Part Incorrect	☐
Handling/Pre	☐	Training	☐	Crimp/Kink/Ripple/Wave	☐	Inspection Incomplete/Unqualified	☐	Wrong Stock Pulled	☐	Part Lost/Missing	☐
Material	☐	Use for Testing	☐	Cuffs	☐	Contamination	☐	Out of Sequence	☐	Part Moved	☐
Internal Transport	☐	Poor Information	☐	Crushing	☐	Countersink	☐	Off-set	☐	Drawing	☐
Tribal Knowledge	☐	Rushing	☐	Heat Treat	☐	Cut Too Short	☐	Mislabeled	☐	Finish	☐
LOA	☐	Product Improvement	☐	Wave/Twist in Tube	☐	Instructions Incomplete/Unclear	☐	Fit/Function	☐	Misread	☐
Substation	☐	Process Improvement	☐	Marks/Chatter	☐	Drill Holes	☐	Misaligned/off center	☐	Turning Sequence	☐
Past Expiry Date	☐	Manufacturing Process	☐	OTHER : _____							
Misidentified	☐	Past Due	☐								

Picklist Print

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Work Order ID: 148086

148086

Parent Item: D119-796-021

D119-796-021

Parent Item Name: AW119 Standard Landing Gear Assembly - Standard OEM Protection

Start Date: 9/27/2016

Required Date: 10/26/2016

Start Qty: 1.00

Required Qty: 1.00

D3456-1

Manufactured No

110

Each

141.0000

2

2

D3456-1

Washer

147740

DAS
6
9-89

Location

Loc Qty

Loc Code

FG

7

25701

7

ST037

59

141989

9

144158

50

ST038A

75

147066

25

147799

50

2

D3672-3

Manufactured No

110

Each

1,173.000

48

48

D3672-3

Washer, Phenolic

144409

DAS
6
9-89

Location

Loc Qty

Loc Code

FG

100

133083

52

134449

48

FP001

213

132639

213

ST049

360

139583

40

142571

320

ST051A

500

146277

500

SFP 77 2016

DQA: _____ Date: _____

**WORK ORDER NON-CONFORMANCE / UPDATE**

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date : _____	Step #: _____	QTY Effective : _____		MRB (QSI042) Approval	
Description Work Order Deviation		Disposition		Completed By	
				Lead hand / Supervisor Approval Verification	
				QC / QA Coordinator Approval	
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐			
OTHER : _____					

Picklist Print

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Work Order ID: 148086

148086

Parent Item: D119-796-021

D119-796-021

Parent Item Name: AW119 Standard Landing Gear Assembly - Standard OEM Protection

Start Date: 9/27/2016

Required Date: 10/26/2016

Start Qty: 1.00

Required Qty: 1.00

D3672-7

Manufactured No

110

Each

1,178.000

48

48

D3672-7

Washer, Phenolic

147431x19

DAS
6
9-89

Location

Loc Qty

Loc Code

FG

40

129987

25

133986

15

ST049

138

134786

138

ST051A

1000

142572

500

147220

500

29

D3883-1

Manufactured No

110

Each

19.0000

2

2

D3883-1

Saddle, Outboard LH

149593x1

147687x1

DAS
6
9-89

Location

Loc Qty

Loc Code

ST404

19

142477

9

142773

10

D3883-2

Manufactured No

110

Each

18.0000

2

2

D3883-2

Saddle, Outboard RH

148743

SEP 22 2016

DAS
6
9-89

Location

Loc Qty

Loc Code

ST404

18

142486

11

144927

7

Friday, June 24, 2016 9:08:59 AM

Shop Packet Print

Page 4

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date : _____		Step # : _____		QTY Effective : _____			MRB (QSI042) Approval Completed By _____ Lead hand / Supervisor Approval Verification _____ QC / QA Coordinator Approval _____		
Description Work Order Deviation				Disposition					
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐		OTHER : _____					

Picklist Print

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Work Order ID: 148086

148086

Parent Item: D119-796-021

D119-796-021

Parent Item Name: AW119 Standard Landing Gear Assembly - Standard OEM Protection

Start Date: 9/27/2016

Required Date: 10/26/2016

Start Qty: 1.00

Required Qty: 1.00

D3884-1

Manufactured No

110

Each

19.0000

2

2

D3884-1

Saddle, Inboard LH

150150x1
148628x1

DAS

6

9-89

Location

Loc Qty

Loc Code

ST404

19

142461

9

142674

10

D3884-2

Manufactured No

110

Each

18.0000

2

2

D3884-2

Saddle, Inboard RH

149576

DAS

6

9-89

Location

Loc Qty

Loc Code

ST404

18

142471

11

144929

7

D3886-041

Manufactured No

110

Each

5.0000

4

4

D3886-041

Lug Assembly

147690 149596x1
149598x2

DAS

6

9-89

Location

Loc Qty

Loc Code

ST528

5

142775

5

SEP 22 2016

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date : _____		Step #: _____		QTY Effective : _____			MRB (QSI042) Approval Completed By _____ Lead hand / Supervisor Approval Verification _____ QC / QA Coordinator Approval _____		
Description Work Order Deviation				Disposition					

Root Cause				FAULT CATEGORY			
Environment ☐	☐ No Re-verification	☐ Pressure/Forced	☐ Temperature/Cure	☐ Power Loss/Surge	☐ Positioned Wrong		
Design ☐	☐ Operator	☐ Bending	☐ Set-up	☐ Folio/Program	☐ Outside Dimensions		
Doc/Data ☐	☐ Offset/Setup	☐ Centre Not Concentric	☐ BOM/Route	☐ Grain	☐ Over/Under tolerance		
Equip/Tooling ☐	☐ Supplier	☐ Cracks	☐ Broken/Damage/Defect	☐ Weld	☐ Part Incorrect		
Handling/Pre ☐	☐ Training	☐ Crimp/Kink/Ripple/Wave	☐ Inspection Incomplete/Unqualified	☐ Wrong Stock Pulled	☐ Part Lost/Missing		
Material ☐	☐ Use for Testing	☐ Cuffs	☐ Contamination	☐ Out of Sequence	☐ Part Moved		
Internal Transport ☐	☐ Poor Information	☐ Crushing	☐ Countersink	☐ Off-set	☐ Drawing		
Tribal Knowledge ☐	☐ Rushing	☐ Heat Treat	☐ Cut Too Short	☐ Mislabeled	☐ Finish		
LOA ☐	☐ Product Improvement	☐ Wave/Twist in Tube	☐ Instructions Incomplete/Unclear	☐ Fit/Function	☐ Misread		
Substation ☐	☐ Process Improvement	☐ Marks/Chatter	☐ Drill Holes	☐ Misaligned/off center	☐ Turning Sequence		
Past Expiry Date ☐	☐ Manufacturing Process	OTHER : _____					
Misidentified ☐	☐ Past Due						

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Work Order ID: 148086

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Parent Item: D119-796-021

D119-796-021

Parent Item Name: AW119 Standard Landing Gear Assembly - Standard OEM Protection

Start Date: 9/27/2016

Required Date: 10/26/2016

Start Qty: 1.00

Required Qty: 1.00

AN3C46A

Purchased

No

110

Each

322.0000

8

8

AN3C46A

Bolt

DAS
6
9-89

Location

Loc Qty

Loc Code

FG

10

122843

10

OVER002

210

134795

70

M134591

70

M134794

70

ST346

102

M132522

33

M133917

69

SEP 22 2016

AN3C50A

Purchased

No

110

Each

135.0000

16

16

AN3C50A

Bolt

DAS
6
9-89

Location

Loc Qty

Loc Code

OVER002

130

M135054

130

ST346

5

M133842

2

M134494

3

M120447x4
M123900x8
122843

OCT 21 2016

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :				MRB (QSI042) Approval Completed By _____ Lead hand / Supervisor Approval Verification _____ QC / QA Coordinator Approval _____	
Description Work Order Deviation				Disposition					
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐							
		OTHER : ☐							

Picklist Print

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Page 7

Work Order ID: 148086

148086

Parent Item: D119-796-021

D119-796-021

Parent Item Name: AW119 Standard Landing Gear Assembly - Standard OEM Protection

Start Date: 9/27/2016

Required Date: 10/26/2016

Start Qty: 1.00

Required Qty: 1.00

AN4C6A

Purchased

No

110

Each

459.0000

24

24

AN4C6A

Bolt

13-297116
135470X8

DAS
6
9-89

Location

Loc Qty

Loc Code

FG	14	
103344	4	
121657	10	
OVER002	300	
m134861	150	
m134955	150	
ST345	145	
m134502	145	

MS21043-3

Purchased

No

110

Each

1,352.000

24

24

MS21043-3

Nut

135442

DAS
6
9-89

Location

Loc Qty

Loc Code

FG	80	
103691	80	
FP001	11	
m130673	11	
GA	315	
m133990	315	
OVER007	400	
m134861	400	
ST302	440	
m134502	40	
m135058	400	
ST304	106	
m131340	106	

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Page 7

SEP 22 2016

DQA: _____ Date: _____

**WORK ORDER NON-CONFORMANCE / UPDATE**

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date : _____		Step #: _____		QTY Effective : _____			MRB (QSI042) Approval 		
Description Work Order Deviation				Disposition					
				Completed By _____					
				Lead hand / Supervisor Approval Verification					
				QC / QA Coordinator Approval					
Root Cause		FAULT CATEGORY							
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐				
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐				
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐				
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐				
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐				
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐				
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐				
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐				
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐				
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐				
Past Expiry Date ☐	Manufacturing Process ☐	OTHER : _____							
Misidentified ☐	Past Due ☐								

Picklist Print

Friday, June 24, 2016 9:08:59 AM

Page 8

Work Order ID: 148086

148086

Parent Item: D119-796-021

D119-796-021

Parent Item Name: AW119 Standard Landing Gear Assembly - Standard OEM Protection

Start Date: 9/27/2016

Required Date: 10/26/2016

Start Qty: 1.00

Required Qty: 1.00

MS21043-4

Purchased

No

110

Each

1,233.000

26

26

MS21043-4

135707

Nut

Location

Loc Qty

Loc Code

FG	40	
104603	40	
GA	17	
m132803	17	
OVER007	600	
m134754	300	
m134943	300	
ST302	576	
m131697	104	
m133769	12	
m134502	300	
m134634	160	

DAS
6
9-89

MS21043-5

Purchased

No

110

Each

138.0000

8

8

MS21043-5

135704

Nut

Location

Loc Qty

Loc Code

FG	20	
101418	20	
GA	76	
116548	76	
ST302	42	
m132382	9	
m134502	33	

DAS
6
9-89
SEP 22 2016

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Page 8

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :				MRB (QSI042) Approval Completed By _____ Lead hand / Supervisor Approval Verification _____ QC / QA Coordinator Approval _____	
Description Work Order Deviation				Disposition					
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐							
		OTHER : ☐							

Picklist Print

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Page 9

Work Order ID: 148086

148086

Parent Item: D119-796-021

D119-796-021

Parent Item Name: AW119 Standard Landing Gear Assembly - Standard OEM Protection

Start Date: 9/27/2016

Required Date: 10/26/2016

Start Qty: 1.00

Required Qty: 1.00

MS21250-05048

Purchased

No

110

Each

106.0000

8

8

MS21250-05048

Bolt (use MS21250-05-048)

135842

DAS

6

9-89

Location

Loc Qty

Loc Code

over006

100

m134973

100

ST295

6

m133694

6

NAS1149C0332R

Purchased

No

110

Each

5,810.000

24

24

NAS1149C0332R

WASHER

Location

Loc Qty

Loc Code

FP001

1808

m132930

1004

m134073

128

m134962

676

GA

141

m133284

141

ST266

3861

m134736

1861

m135046

2000

NAS1149C0432R

Purchased

No

110

Each

1,557.000

48

48

NAS1149C0432R

WASHER

135544

DAS

6

9-89

Location

Loc Qty

Loc Code

GA

1272

m125807

427

m134676

845

ST266

285

m131452

285

SEP 22 2016

Friday, June 24, 2016 9:08:59 AM

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Page 9

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date : _____		Step # : _____		QTY Effective : _____			MRB (QSI042) Approval Completed By _____ Lead hand / Supervisor Approval Verification _____ QC / QA Coordinator Approval _____		
Description Work Order Deviation				Disposition					

Root Cause			FAULT CATEGORY		
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐
Past Expiry Date ☐	Manufacturing Process ☐	OTHER : _____			
Misidentified ☐	Past Due ☐				

Picklist Print

Friday, June 24, 2016 9:08:59 AM

Page 10

Work Order ID: 148086

148086

Parent Item: D119-796-021

D119-796-021

Parent Item Name: AW119 Standard Landing Gear Assembly - Standard OEM Protection

Start Date: 9/27/2016

Required Date: 10/26/2016

Start Qty: 1.00

Required Qty: 1.00

NAS1149C0532R

Purchased

No

110

Each

483.0000

16

16

NAS1149C0532R

WASHER

135671

DAS

6

9-89

Location

Loc Qty

Loc Code

GA

60

116513

60

ST266

423

m133031

23

m134756

200

m135056

200

SEP 22 2016

139x89x35crate

Purchased

No

110

Each

8.0000

1

1

139x89x35crate

Agusta Crate

MS21920-28

Purchased

No

Each

153.0000

2

MS21920-28

Clamp

16/10/25

DAS

6

9-89

Location

Loc Qty

Loc Code

FG

1

105884

1

LG050

142

M135007

67

M135008

25

M135009

50

LG051

1

M132169

1

LG057

2

M134130

2

ST5543

7

M134590

7

SEP 22 2016

Friday, June 24, 2016 9:08:59 AM

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DQA: _____ Date: _____



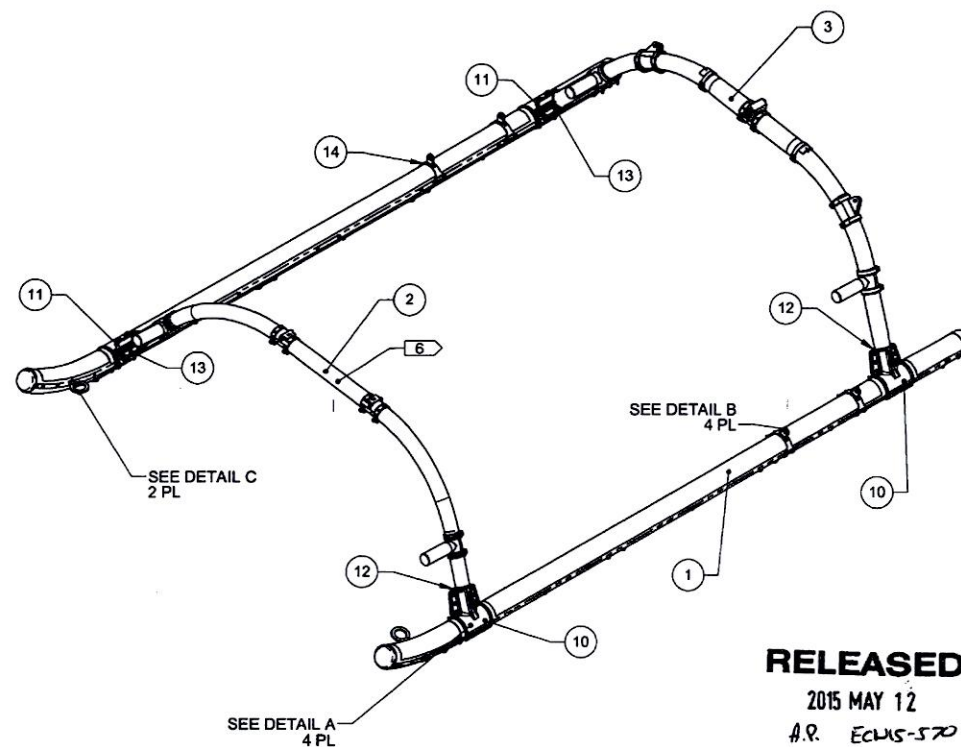
WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date : _____	Step #: _____	QTY Effective : _____		MRB (QSI042) Approval	
Description Work Order Deviation		Disposition			
				Completed By	
				Lead hand / Supervisor Approval Verification	
				QC / QA Coordinator Approval	
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐			
OTHER : _____					

ITEM	QTY -021	P/N	DESCRIPTION
	X	D119-796-021	STD GEAR WITH STD WEARPADS
1	2	D119-646-041	STD SKIDTUBE WITH STD WEARPADS
2	1	D119-796-151	XTUBE ASSY (AW119 MKII FWD)
3	1	D119-796-251	XTUBE ASSY (AW119 MKII AFT)
4	48	D2652	BUSHING
5	2	D3407-041	TOW RING
6	4	D3417-5	WASHER
7	2	D3456-1	WASHER
8	48	D3672-3	PHENOLIC WASHER
9	48	D3672-7	PHENOLIC WASHER
10	2	D3883-1	SADDLE, OUTBOARD LH
11	2	D3883-2	SADDLE, OUTBOARD RH
12	2	D3884-1	SADDLE, INBOARD LH
13	2	D3884-2	SADDLE, INBOARD RH
14	4	D3886-041	LUG ASSEMBLY
15	8	AN3C46A	BOLT
16	16	AN3C50A	BOLT
17	24	AN4C6A	BOLT
18	24	MS21043-3	NUT, SELF-LOCKING
19	26	MS21043-4	NUT, SELF-LOCKING
20	8	MS21043-5	NUT, SELF-LOCKING
21	8	MS21250-05048	BOLT
22	24	NAS1149C0332R	WASHER
23	48	NAS1149C0432R	WASHER
24	16	NAS1149C0532R	WASHER



RELEASED

2015 MAY 12

A.P. ECUS-570

D119-796-021 STD GEAR WITH STD WEARPADS

NOTES:
 1) MATERIAL: N/A
 2) FINISH: NONE
 3) TOLERANCES: N/A
 4) UNITS: N/A
 5) BREAK SHARP EDGES: N/A
 6) IDENTIFICATION: INSTALL D2729-4 RED DECAL IN LOCATION SHOWN
 7) WEIGHT: 122.7 LBS

A	NEW ISSUE	AP	15.04.01
REV.	DESCRIPTION	BY	DATE
DESIGN	AP	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	AP		
CHECKED	AJS	DRAWING NO.	REV. A
MFG. APPR.	DD	D119-796-021	SHEET 1 OF 4
APPROVED	HS	TITLE	SCALE
DE APPR.	DS	STD GEAR WITH STD WEARPADS	NTS
DATE	15.04.01	COPYRIGHT © 2014 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD	

w/o 148086

rem 16/06/24

MS21250-05048 BOLT
NAS1149C0532R WASHER
D3672-7 WASHER
2 PL
10

D3883-1 SADDLE (LHS)
D3883-2 SADDLE (RHS)

AN3C50A BOLT
D3672-7 WASHER
D2652 BUSHING
4 PL
10

D3884-1 SADDLE (LHS)
D3884-2 SADDLE (RHS)

D3672-7 WASHER
NAS1149C0532R WASHER
MS21043-5 NUT
2 PL
10

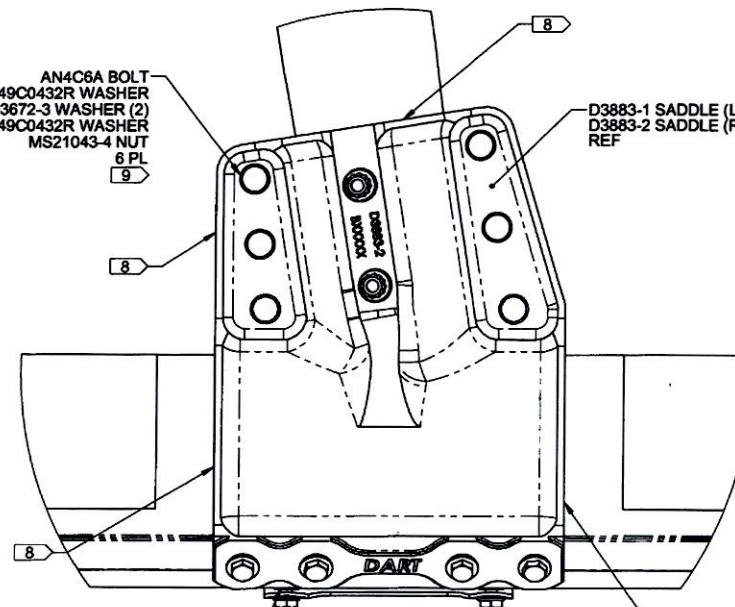
D2652 BUSHING
D3672-7 WASHER
NAS1149C0332R WASHER
MS21043-3 NUT
4 PL
10

DETAIL A
4 PL



AN4C6A BOLT
NAS1149C0432R WASHER
D3672-3 WASHER (2)
NAS1149C0432R WASHER
MS21043-4 NUT
6 PL
9

D3883-1 SADDLE (LHS)
D3883-2 SADDLE (RHS)
REF



DETAIL A



RELEASED

2015 MAY 12

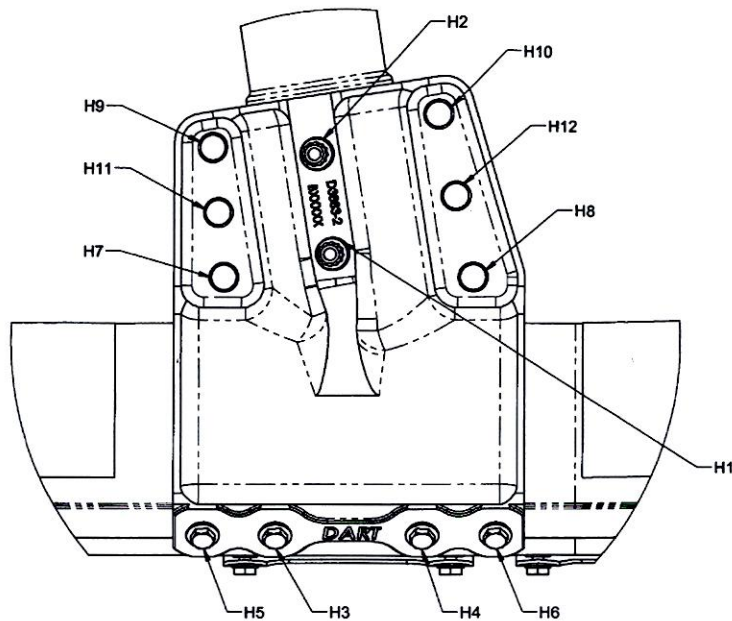
A.P. EN 15-570

NOTES:

- 1) MATERIAL: N/A
- 2) FINISH: NONE
- 3) TOLERANCES: N/A
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: N/A
- 6) IDENTIFICATION: N/A
- 7) WEIGHT: N/A
- 8) APPLY A CONTINUOUS BEAD OF SIKAFLEX -241/-291 OR PROSEAL 890 OR MIL-S-8802 CLASS B2 SEALANT IN THE LOCATIONS SHOWN INCLUDING THE FOLLOWING:
 - A) ALONG SADDLE/CROSSTUBE INTERFACE
 - B) BETWEEN THE SADDLE FLANGES
 - C) ALONG SADDLE/SKIDTUBE INTERFACE
- 9) LIGHTLY TIGHTEN ALL BOLTS IN THE NUMERICAL ORDER SPECIFIED ON SHEET 3, THEN TIGHTEN TO SPECIFIED TORQUE IN TABLE 1.
- 10) INSTALL WET WITH SIKAFLEX -241/-291 OR PROSEAL 890 OR MIL-S-8802 CLASS B2 SEALANT
- 11) ALL NUTS TO BE INSTALLED ON THE INBOARD SIDE

APPROVED

DESIGN	AP	DART AEROSPACE LTD	
DRAWN	AP	HAWKESBURY, ONTARIO, CANADA	
CHECKED	AJS	DRAWING NO.	REV. A
MFG. APPR.	DD	D119-796-021	SHEET 2 OF 4
APPROVED	HS	TITLE	SCALE
DE APPR.	DS	STD GEAR WITH STD WEARPADS	NTS
DATE	15.04.01	COPYRIGHT © 2014 BY DART AEROSPACE LTD	
THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.			



SUPPLEMENTAL VIEW - TORQUE SEQUENCE

TABLE 1: TORQUE SEQUENCE AND MAX TORQUE

TORQUE SEQUENCE	PART NUMBER	TORQUE
H1	MS21250-05048	66-85 IN-LBS (7.3 - 9.6 n-m)
H2	MS21250-05048	66-85 IN-LBS (7.3 - 9.6 n-m)
H3	AN3C50A	15-25 IN-LBS (1.7 - 9.6 N-m)
H4	AN3C50A	15-25 IN-LBS (1.7 - 9.6 N-m)
H5	AN3C50A	15-25 IN-LBS (1.7 - 9.6 N-m)
H6	AN3C50A	15-25 IN-LBS (1.7 - 9.6 N-m)
H7	AN4C6A	50-70 IN-LBS (5.7 - 7.9 N-m)
H8	AN4C6A	50-70 IN-LBS (5.7 - 7.9 N-m)
H9	AN4C6A	50-70 IN-LBS (5.7 - 7.9 N-m)
H10	AN4C6A	50-70 IN-LBS (5.7 - 7.9 N-m)
H11	AN4C6A	50-70 IN-LBS (5.7 - 7.9 N-m)
H12	AN4C6A	50-70 IN-LBS (5.7 - 7.9 N-m)

RELEASED

2015 MAY 12

AR EN 15-570

APPROVED

DESIGN	AP	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	AP		
CHECKED	AJS	DRAWING NO.	REV. A
MFG. APPR.	DD	D119-796-021	SHEET 3 OF 4
APPROVED	HS	TITLE	SCALE
DE APPR.	DS	STD GEAR WITH STD WEARPADS	NTS
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D3407-041 TOW RING
D3417-5 WASHER

9

INBOARD

D3417-5 WASHER
D3456-1 WASHER
MS21043-4 NUT

8 9 11

DETAIL C
2 PL

D2652 BUSHING
NAS1149C0332R WASHER
MS21043-3 NUT
2 PL

8 9 10

INBOARD

D3886-041 LUG ASSEMBLY

9

D2652 BUSHING
AN3C46A BOLT
2 PL

8 9 10

DETAIL B
4 PL

RELEASED

2015 MAY 12

A.P. En 15-570

NOTES:

- 1) MATERIAL: N/A
- 2) FINISH: NONE
- 3) TOLERANCES: N/A
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: N/A
- 6) IDENTIFICATION: N/A
- 7) WEIGHT: N/A
- 8) INSTALL WET WITH SIKAFLEX -241/-291 OR PROSEAL 890 OR MIL-S-8802 CLASS B2 SEALANT
- 9) APPLY FAY SEAL AND FILLET SEAL USING SIKAFLEX -241/-291 OR PROSEAL 890 OR MIL-S-8802 CLASS B2 SEALANT
- 10) TORQUE AN3 HARDWARE TO 20-25 IN-LBS
- 11) TORQUE AN4 HARDWARE TO 50-70 IN-LBS

APPROVED

DESIGN	AP	DART AEROSPACE LTD	
DRAWN	AP	HAWKESBURY, ONTARIO, CANADA	
CHECKED	AJS	DRAWING NO.	REV. A
MFG. APPR.	DD	D119-796-021	SHEET 4 OF 4
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